

Work Order ID 52319

Tuesday, September 22, 2009 3:09:48 PM

Page 1

Item ID: D2500-1-190

Accept

Revision ID: G

Item Name: Ext'n - 'I' Beam Tube 4"

Start Date: 9/23/2009 Start Qty: 100.00

Required Date: 10/9/2009 Req'd Qty: 100.00

Reference:

Approvals: Process Plan: RD Date: 09-9-24 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start 
Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2500	Rev U/R								

100 0.00



Purchasing

PURCHASING

Memo

0.00

Purchasing

Issue P/O: 10476 ☐ a) Extrude as per Dwg D2500 ☐ b) Material:
6061-T6 (QQ-A-200/8) ☐ c) Minimum yield tensile strength = 35 ksi ☐ d)
Minimum ultimate tensile strength = 38 ksi ☐ e) Minimum elongation = 8% ☐ f)
Order at 190" long ☐ g) Bon L. Canada Inc. tool #

CZ 09/09/25 100

110 0.00



Packaging

Receive & Inspect for Damage & Mat'l Certs

Memo

0.00

Packaging

Ensure material certification is attached

PL 9/10/23 (101)

120 0.00



QC

QC6- Inspect dimensions to drawing

Memo

0.00

Quality Control

Check Pull test per Dwg D2500 for compliance page attached. Check hardness
with Webster tester

2) S 09/10/23

(still in crates)






counters



(x101)



Work Order ID 52319

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Page 2

Item ID: D2500-1-190 Accept  Setup Start 
Revision ID: G Stop 
Item Name: Ext'n - 'I' Beam Tube 4"
Start Date: 9/23/2009 Start Qty: 100.00  Cust Item ID:
Required Date: 10/9/2009 Req'd Qty: 100.00  Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start 
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130  Packaging Packaging	Identify as per dwg & Stock Location: _____ Memo BACK HALL SKID TUBE RAKE	0.00 0.00						B 9-10-26	
140  QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00						MF 09-10-27	

D2500-1-190P x101 B52319 MF 09-10-27

DART**RELEASED**
07.06.28-11**UNDER REVIEW**08.04.02 UP
FOR REV. H

DESIGN #	DRAWN BY P#	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D2500	REV. G SHEET 1 OF 3
DATE 07.04.17		TITLE EXTRUSION	SCALE NTS
A	96.03.19	NEW ISSUE	
B	96.03.24	CHANGE INTERNAL WEB	
C	96.04.26	ADD D2500-3 WEB	
D	96.10.07	ADD MATERIAL PROPERTIES	
E	96.10.24	CHANGE MATERIAL TEMPER	
F	97.09.29	CHANGE MAT. TO 6061-T6	
G	07.04.17	ADD NOTES 3,5,6	

1. MATERIAL: 6061-T6 (QQ-A-200/8)

MINIMUM TENSILE YIELD STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
MINIMUM ELONGATION = 8%

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO
ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY
TO ENSURE THAT THE BATCH MEETS THE ABOVE
MINIMUM MECHANICAL PROPERTIES

2. BREAK ALL SHARP CORNERS 0.010 MAX
3. ALL DIMENSIONS ARE IN INCHES
4. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
5. FOR D2500-1 PART NUMBER IS D2500-1-XXX WHERE XXX IS CUT LENGTH (EX. D2500-1-190 IS 190" LONG)
D2500-1 EXTRUSION MANUFACTURED FROM:
A) BON L DIE # 897015 -> PREFERRED
B) CARADON MIDEAST DIE # PAH-28030
C) CARADON MTL DIE # MH-18868
6. FOR D2500-3, PART NUMBER IS D2500-3-XXX WHERE XXX IS CUT LENGTH IN INCHES (EX. D2500-3-100 IS 100" LONG)
D2500-3 EXTRUSION MANUFACTURED FROM:
A) CARADON INDALEX DIE # MS-18867

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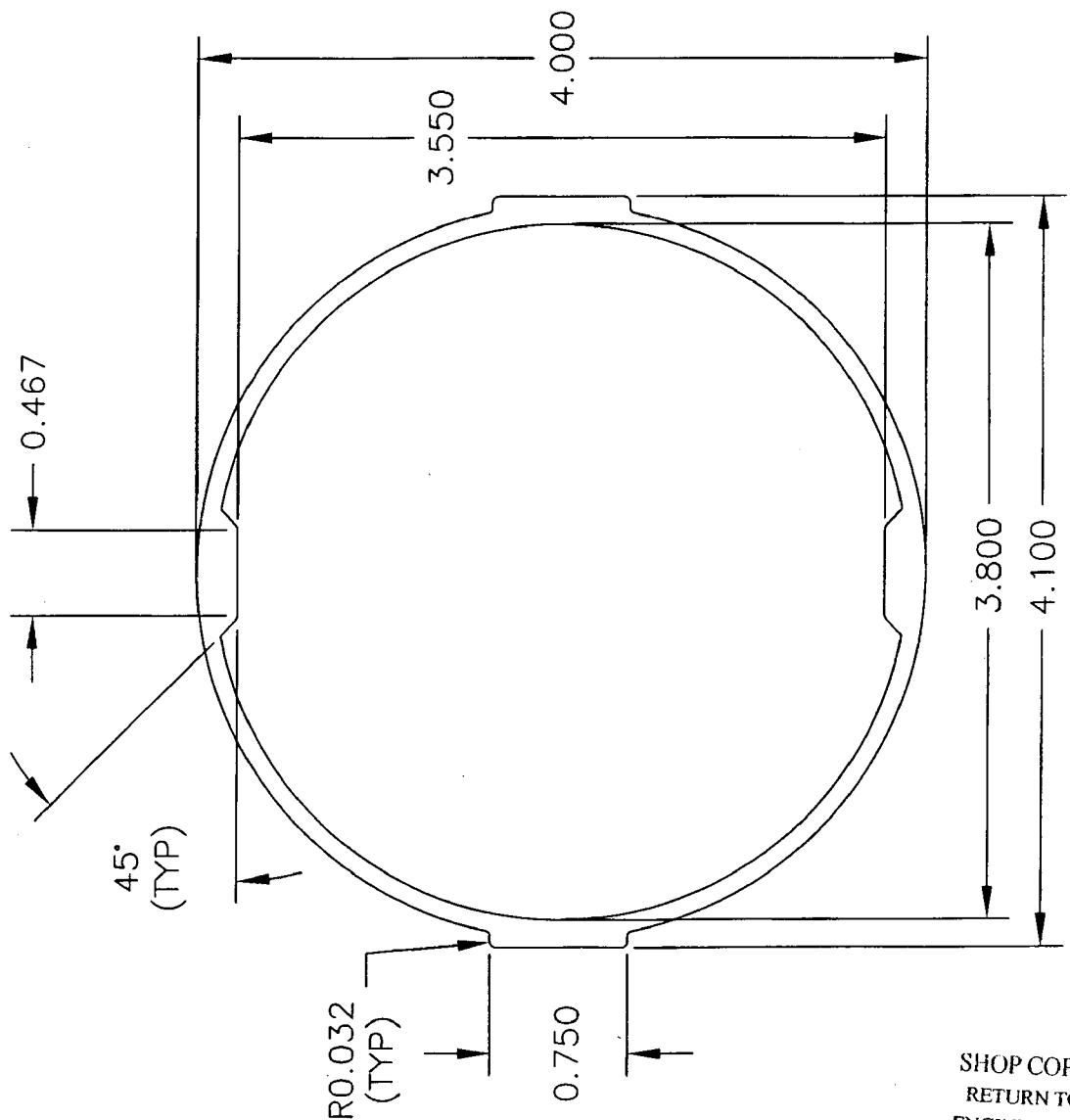
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CHECKED #	APPROVED #	DRAWING NO. D2500	REV. G SHEET 2 OF 3
DATE 07.04.17		TITLE EXTRUSION	SCALE 1:1

RELEASED
07.06.28 #

UNDER REVIEW
08.04.02 UP
FOR REV. H



D2500-1

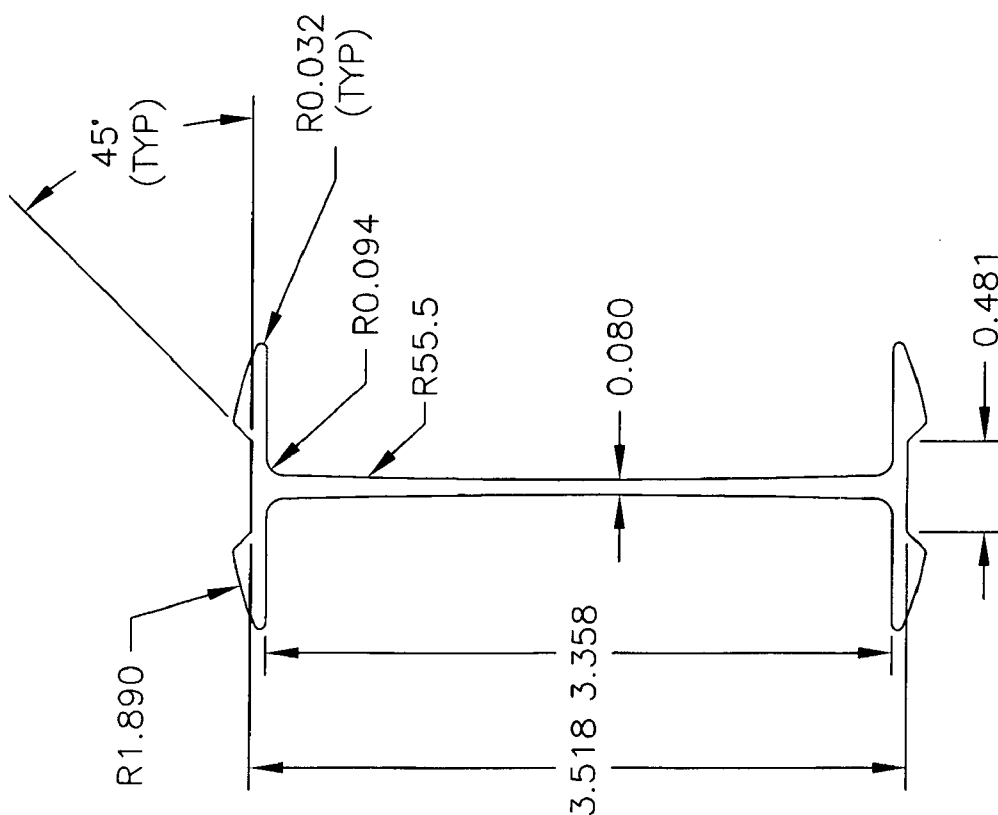
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2500	REV. G SHEET 3 OF 3
DATE 07.04.17		TITLE EXTRUSION	SCALE 1:1

RELEASED
07.06.28 *[Signature]*

UNDER REVIEW
03.04.02 *[Signature]*
FOR REV. H



D2500-3

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INVOICING COMPANY AND LOCATION
SIGNATURE ALUMINUM CANADA
1850 CLEMENTS ROAD
PICKERING ON L1W 3R8

SHIPPING MANIFEST

ACCT# 00046024

SHIP TO DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY ON K6A 1K7 CN PHONE 613-632-5200	SOLD TO / PURCHASER DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY ON K6A 1K7 CN PHONE 613-632-5200
--	--

TERMS / FREIGHT
O / P

REFER TO
THESE NUMBERS ON
ALL CORRESPONDENCE

MANIFEST DATE 10-22-09
MANIFEST NUMBER 670840
SALES ORDER NUMBER 55856

CREDIT REP HAMBROOK, PAU 905-508-3250	SALES REP
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LOCATION PIC	TRAILER NUMBER 57373	SALESMAN 59358	FIELD SALES REP Kutter A 450-435-6551	CUST SERVICE REP Burton D 905-427-2227
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CUSTOMER ID 46024	ORDER DATE 09/25/09	CUSTOMER PO NUMBER 10476	JOB	BILL OF LADING NUMBER 08400961
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ITEM NO.	ORIGINAL ORDER QUANTITY	UNIT	PREVIOUS SHIPPED QUANTITY	MFG. PART NUMBER	ALLOY & TEMPER	FINISH DESCRIPTION	THIS SHIPMENT			UNIT	QUANTITY DUE
				CUSTOMER PART NUMBER	LENGTH	FABRICATION DESCRIPTION	NBR OF PKGS	GROSS POUNDS	NET QUANTITY		
01	2681	LB	0	DAA-897105-2	6061 /T6	MILL	5	2754	2635	LB	0
	1583	FT	0	D2500-1-190	190"	CERTIFICATE OF COMP			1599.15	FT	0
	100	PC	0		+5/16 "	(+010-010,0110-0090)			101	PC	0
					-0 "						
				LOT/TKT DETAIL:		55856010 / 336537	1	258	236		9 PC
						55856010 / 336538	1	624	597		23 PC
						55856010 / 336539	1	624	597		23 PC
						55856010 / 336540	1	624	597		23 PC
						55856010 / 336696	1	624	606		23 PC

101

Transportation/Traffic damages and/or shortage claims are to be noted on the delivery copy of sellers shipping manifests and signed and dated below by customers authorized representatives.
No return materials will be accepted for credit without permission. The articles and/or services covered by this shipping manifest were produced in accordance with the fair labor standards act of 1938 as amended. Order accepted subject to the terms and conditions stated on the reverse side.

PAGE 1

5	2754	2635	LB
		1599.15	FT
		101	PC
TOTALS			

CERTIFICATE OF COMPLIANCE

SIGNATURE ALUMINUM CANADA

1850 CLEMENTS ROAD
PICKERING, ON L1W 3R8

Cert Date	Cert No	Sales Order	Page
10/22/09	199781	55856	1
Cust PO	B/L No	Lot	Date
10476	08400961	55856010	10/22/09

Sold To	Ship To
46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7	46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Item No	Part No	Item Description	Cust Part
1.000	DAA-897105-2	190" Mill 6061 T6	D2500-1-190
Gross Weight	2754 LBS		
Net Qty	2,635 LB	101 PC	1599 FT 5 PKG
Specification	Die Desc		
AMS-QQ-A-200/8 & ASTM B221-08			

Mechanical Tests:

Test No.	Tensile MPA / KSI	Yield MPA / KSI	%Elongation	Conductivity	Bend/ Drift HREW
1	313.3 / 45.5	276.6 / 40.1	8.6	.0	93

Chemical Analysis:

SI	FE	CU	MN	MG	CR	ZN	TI
.66	.27	.24	.07	.87	.06	.08	.02

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgment form. No other warranties are applicable.

Conchita Ko, QA Manager Signature Aluminum Canada Inc

Handwritten signature and date: 09/10/23

Handwritten initials: HL



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO10476

Purchase Order Date 9/25/09

PO Print Date 9/25/09

Page Number 1 of 1

Order From :

VC-BON001

SIGNATURE ALUMINUM
1850 CLEMENTS ROAD
PICKERING, ON L1W 3R8
CA

FXED
09/25/09

Contact Name
Vendor Phone 800 563 1079
Vendor Fax 800 565 8339
Vendor Account Nbr

Buyer Chantal Lavoie
Requisition Nbr
Tax Resale Nbr 10127-2607
Terms Net 30
Currency CAD
FOB

Ship To : DART AEROSPACE LTD 1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D2500-1-190P	Ext'n - I' Beam Tube 4"	10/16/09 Yes	100.00 Each	Yours ppd	\$68.7100	\$6,871.0

REC 101 PC 9/14/23

Special Inst: EXTRUDE AS PER DWG D2500 REV. G
MATERIAL: 6061-T6 (QQ-A-200/8)
MINIMUM YIELD TENSILE STRENGTH
=35 KSI
MINIMUM ULTIMATE TENSILE
STRENGTH = 38KSI
MINIMUM ELONGATION = 8%
190" LONG
BON L CANADA TOOL# 897015
PULL TEST REQUIRED TO ASTM
STANDARD B221
B52319

PO Total: \$6,871.0

MATERIAL CERTIFICATION
REQ'D UPON DELIVERY

Change Nbr: 1

Change Date: 9/25/09

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable